In regard to the comparative indications of digitalis and caffeine in organic diseases of the heart, the author writes: "Digitalis is especially indicated in cases of excessive frequency of cardiac beats, with tumult and irregularity; caffeine, particularly in cases of cardiac weakness, with slowness of the contractions." The fourth section embraces the neuroses of the heart, in which are comprised palpitations, angina, and exophthalmic goitre. The work concludes with the study of inflammatory affections of the aortic arch, and aneurism of this portion of the main arterial trunk.

Three fine chromo-lithographic plates representing myocarditis, chronic aortic disease, and embolism of the left median cerebral artery are appended to the printed text, and are a suitable crowning addition to this volume of thorough clinical work.

To sum up our general impression of the work, we would say it is really admirable throughout. It shows, in its philosophical grasp of a great subject, a broad intelligence. The symptoms and diagnostic differences are everywhere given with ample details. Many of the physiological explanations as applied to cardiac pathology are novel and striking. As to the therapeutic indications, whilst we cannot always agree, we invariably have read with interest the statements made by the writer. Many of his suggestions we accept with suspended judgment, simply because we have not tried them. It would be well if this work were translated for American readers, for, except Flint's treatise, which is fast becoming old, we have nothing to compare to it. B. R.

ART. XIX.—*Practical Histology and Pathology.* By HENEAGE GIBBES, M.D., Lecturer on Physiology and Histology in the Medical School of Westminster Hospital; Late Curator of the Anatomical Museum, King's College. Second edition. 12mo. pp. 154. Philadelphia: P. Blakiston, Son and Co., 1882.

WITHIN the two years which have sufficed to call forth a second edition of this little book, it has certainly gained for itself an enviable esteem as a reliable and excellent synopsis of practical methods; the present revision will go far to strengthen its favourable reputation. The book has been somewhat enlarged by an increment consisting of two chapters to the pathological section regarding the now universally studied Bacteria, as well as by additions and alterations in the original matter.

The paragraphs devoted to microscopes and lenses, naturally, contain changes and additions to bring the text to date, as within the last two years much has been done in the now almost universally manufactured oil immersion lenses, to the admirable qualities of which Dr. Gibbes adds his tribute. The advice to the casual worker, however, to purchase an oil immersion without correcting adjustment on the ground of the practice incident to training the eye to know when the lens is properly adjusted, we hardly endorse. That these lenses should have correcting adjustment to render their performance equally good under varying conditions of preparation and immersion fluid, is now conceded by nearly all first-class makers. Oil immersions are so sensitive to the correcting collar that the eye soon learns to recognize the point of best definition, and it must, indeed, be a casual worker to whom the acquiring of this eye-training is not worth all the time it costs. Practical men, as a class, are lamentably deficient in obtaining the best results with their instruments; surely those to whom lenses are a means of investigation should be able to handle and manipulate their tools to the very best possible advantage, and especially should they be able to tell whether their lenses were fairly corrected for present conditions. That a correction on an oil glass *is* of practical value where the highest definition is required is undoubted, as the seeing of delicate detail, as intra-cellular networks or striæ, is sometimes the matter of a turn of the collar; moreover, with a non-correcting lens the best effect is by no means always at once obtained, since frequently for their best performance correction by varying the length of the tube of the stand is necessitated; if, however, such care be deemed superfluous, then with equal facility can the collar of the adjustable lens be always placed at the same point, with the advantage that useful education of the eye may be had without a change of lens. It would have been well to state that the great nuisance of cedar oil and damaged mounts can be disposed of by the substitution of other immersion media, among the best of which is Van Heurck's (balsam copaiba and vaseline or oil of cedar)—which are now generally adopted by American makers, whose oil immersions are second to none; these immersion-fluids wash off readily with water, and do not affect ordinary mounts.

It is gratifying to note that the importance of proper illumination is still more emphasized, and neutralizing blue glass for artificial light and the achromatic condenser recommended. Even a limited observation will convince any one that of the many using the microscope with artificial light, it is but the exception to see proper illumination receiving attention; without blue glass the appearance of many stainings is entirely marred; without careful graduation and proper adjusting of the intensity of light the definition of the best lens is impaired.

We also find a passing word in favour of large stands, with all the refinements for delicate work. In this the author is quite in accord with the experience of many—for the work-table a small stand (the simpler the better) is indispensable; when, however, a careful examination or exact observation is on hand, in which every gain in definition is of importance, the large elaborate stands, when properly handled, show preparations in a manner never approached by the small laboratory stand, this being especially so regarding the continental or "Hartnack" model. To the many attached to the latter stands, this may seem exaggeration, but careful comparison will, we believe, confirm the assertion.

The chapter on Staining has been remodelled by many additions and some omissions, the list containing the more recent dyes, including many anilines. We regret that the author should have seen fit to drop from his list carmine. While true that for research hæmatoxylin has largely taken its place, yet carmine is also useful when carefully applied, giving admirable differentiation, which for ordinary sections is equal to that of hæmatoxylin, and withal possessing a certainty of permanence as well as greater transparency of colour, to which the latter cannot claim. If not favoured, it certainly deserved its former place in the list of stains, in which Bismarck brown could with propriety have been included, as for some purposes—as photography—it is especially valuable. The sections on double and triple staining possess their former interest. In the paragraph regarding choice of cover-glasses we mark a change in opinion; formerly with the scorn of the "practical men" round covers, with the turntable, were consigned to "where æsthetic mounting is the order of the day." The advantages of square covers resulting in clumsy and insecurely cemented slides, when the greater ease, security, and rapidity offered by a turntable and round covers were at hand, we confess never to have appreciated; however, the necessities of oil immersions, and perhaps glycerine mounts, have modified our author's opinion, and we now find "for ordinary work square covers will do," but ones appropriate for use with the turntable are recommended when the slides are to be securely sealed. A chapter on injecting has been added to the space allotted to technology.

The section devoted to "Practical Histology" has been rendered more complete by the insertion of descriptions of a number of the varieties of the connective-tissue group, including endothelium, which were before wanting.

It is, however, the pathological section which has received the largest share of new matter, the pages from barely five being increased to forty. Useful hints are added as to sealing up jars with preparations for the museum, as well as the directions of Mr. Prestley Smith regarding the "Mode of preserving ophthalmic specimens," which will be of value to those interested. The final two chapters of the book are devoted to Bacteria; one to the methods of culture employed by Klein for the B. anthracis and of Koch for the B. tuberculosis, the other to the methods of staining these organisms. The principal staining methods for the B. tuberculosis are given, including those of Koch, Ehrlich, Weigert, Baumgarten, and our author. Of especial interest, in this connection, is the method of Dr. Gibbes to double stain sputum at once, possessing the advantages of rapidity and of dispensing with the use of nitric acid. Rosaniline hydrochloride, methyl blue, aniline oil, rectified spirit, and distilled water compose the formula. "It brings out the bacilli quite as well as the other processes, and it stains all putrefaction bacteria and micrococci very deeply, so that in one field of the microscope blue micrococci and bacteria may be compared with the red bacilli of tubercle"—a statement quite in contrast with the assertions of those who deny the specific staining of the B. tuberculosis.

On turning the last page of this little book, one feels that a really valuable guide lies before him; one exactly adapted to the needs of those to whom laboratory instruction has never been available. Our author shows in his methods a care and respect for exactness to be warmly recommended—a happy compromise between the fruitless nicety of the microscopical dilettante and the wilful negligence of the practical worker.

G. A. P.

ART. XX.—*Index-Catalogue of the Library of the Surgeon-General's Office, United States Army. Authors and Subjects.* Vol. IV. E–Fizes. 4to. pp. [12] 1033. Government Printing Office, Washington, 1883.

THE appearance of each new volume of this most important work is a subject of congratulation, not only to those who have been concerned with its preparation, but to every really scientific physician.

When the predecessors of this volume were issued, we spoke of the magnitude and scope of the work. It is therefore unnecessary again to express our sentiments thereon. The present issue contains 4802 author-titles, representing 1926 volumes and 3885 pamphlets. 12361 subject-